INTRODUCTION

In October of 1999, SBC announced its intention to deploy a new Broadband Network Infrastructure in order to expand the availability of DSL services to end users in its territories. This project is commonly referred to as "Project Pronto." The SBC ILECs in their territories will provide wholesale access to the underlying network installed as part of this project for use by its CLEC customers in order to provision end user xDSL service. The purpose of this document is to describe this offering and the various network service arrangements necessary to provision an xDSL service over the new Broadband Infrastructure being deployed by the SBC ILECs under the "Project Pronto."

SBC BROADBAND DEPLOYMENT

The Broadband Infrastructure Project is a portion of PROJECT PRONTO, which in combination with CO based DSLAM technology will make broadband services available to an estimated 77 million customers, or about 80 percent of end users in the SBC 13-state territory. Starting in 1999 and continuing over the next three years, SBC will invest more than $6 billion to extend the reach of full-rate DSL beyond 12Kft from the central office. The Broadband Infrastructure Project requires placement of at least five network service arrangements in the TELCO network: a Next Generation Digital Loop Carrier ("NGDLC") remote terminal ("RT"); RT derived DSL loops (using the NGDLC system); a NGDLC central office terminal ("COT"); and an Optical Concentration Device ("OCD").

Fiber-fed NGDLC RTs are being installed to effectively shorten copper loops for DSL to less than 12 Kft. Therefore, the only portion of the loop remaining sensitive to disturbers in the network is the distribution portion of the copper loop. The distribution copper extends from the customer premises to a Serving Area Interface ("SAI"). At the SAI a cross-connect will be placed to integrate the distribution copper to a copper feeder cable extending back from the SAI to the RT. This copper feeder cable is hardwired to the backplane of the NGDLC RT equipment. Within the NGDLC RT equipment, the data signal to and from the end user premises is delivered to a combination voice and data card. This card provides a splitter functionality to separate and combine these data and voice signals. Also, in conjunction with the rest of the NGDLC RT equipment, this card packetizes the data bit stream. The NGDLC system then transports both the voice and data signals on separate fibers to the central office. An OC-3 facility will be utilized to transport voice and a separate OC-3c facility will be utilized to transport the data. The data facility will be a non-protected fiber. The voice facility will be protected with redundant (but not diverse) fiber and electronics. In the central office, the incoming data OC-3c will terminate on the fiber distribution frame ("FDF") and be delivered to an Optical Concentration Device ("OCD"). The OCD aggregates many incoming OC-3cs from multiple NGDLC RTs to a smaller number of outbound OC-3c or DS3 facilities. Additionally, the OCD routes packetized data traffic to the appropriate carrier's ATM network based upon packet routing addresses. The incoming voice OC-3 will also terminate on the FDF and be delivered to the NGDLC COT. The COT delivers the voice signals to either the SBC ILEC voice switch or to a CLEC's collocation to be extended to the CLEC's voice switch.

Currently the only card available for use with the NGDLC technology SBC is deploying is the ADSL Digital Line Unit ("ADLU") card. The ADLU card is a DSL service card. This card provides a portion of the DSLAM functionality in that it splits the voice and data signal and performs part of the data signal conversion. At this time, each ADLU card is capable of supporting two DSL end users (dual cards). In the future, quad cards will be released capable of supporting 4 end users per card. Additionally, cards supporting various other xDSL type services (such as SDSL, HDSL etc.) are expected to be developed in the future.

SBC WHOLESALE SERVICE

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With the deployment of this infrastructure, SBC will be offering to the CLEC community a new wholesale service to provide CLECs the capability to utilize this infrastructure and establish a DSL service for an end user. SBC will provide this service in three basic configurations:

1. **Line Shared Data**
2. **Stand-Alone Data Only**
3. **Integrated Voice and Data**

LINE SHARED DATA

The first configuration CLECs will be provided is for situations in which a CLEC wishes to provide a DSL service to an end user over SBC's NGDLC infrastructure by using only the high frequency portion of a voice and data loop (i.e., the DSL portion of the loop). SBC will provide this product offering by provisioning the high frequency portion of the loop over the NGDLC and feeder/distribution copper. This will be accomplished by moving the existing copper loop from its current infrastructure into the NGDLC infrastructure by physically moving the distribution piece of the loop into the NGDLC feeder at the SAI. Because the voice portion of this loop is physically moved at the same time, the voice is also now carried by the NGDLC infrastructure. SBC will deliver the voice signal to its voice switch located in the central office via the NGDLC COT. The CLEC's data portion of the loop will be delivered through the OCD located in the central office to the appropriate CLEC point of collocation.

In the line shared data the network service arrangements provided to CLECs will consist of the following: the high-frequency portion of the copper sub-loop (HFPSL) from the remote terminal Digital Loop Carrier appearance over feeder and distribution copper facilities SAI to the end user demarcation point; an ADSL-DLE specific feeder loop from the central office to the SAI, including a port termination on an ADLU card placed in the NGDLC equipment; use of the OC-3c dedicated fiber from the NGDLC RT to the FDF and delivered to the OCD; and an OCD Port Termination . Two physical cross-connects will be necessary in this configuration. A copper cross-connect will be necessary in the SAI in the field, and a fiber OC-3c cross-connect or copper DS-3 cross-connect will be needed at the FDF or DSX, respectively, to extend the OCD port to the CLEC point of collocation.

The following is a numerical listing of the new network service arrangements currently being developed in conjunction with this offering in the Line Shared Environment:

1. **DLE-DSL HFPSL (High Frequency Portion of the Sub-Loop)**
2. **DLE-DSL Feeder**
3. **OCD Port Termination (OC-3 or DS3)**

The following is a listing of the cross-connects available in this configuration:

1. **DLE SAI Cross Connect**
2. **OCD Cross-Connect to Collocation**

DATA ONLY

The second configuration that will be offered to CLECs is for the situation in which the CLEC wishes to provision an entire facility dedicated strictly to DSL data service over NGDLC. In this configuration there is no voice signal provided over the copper portion of the loop. In the data only environment, the new network service arrangements will consist of the same network service arrangements listed above for the line sharing option. However, the copper component from the remote terminal to the end user will no

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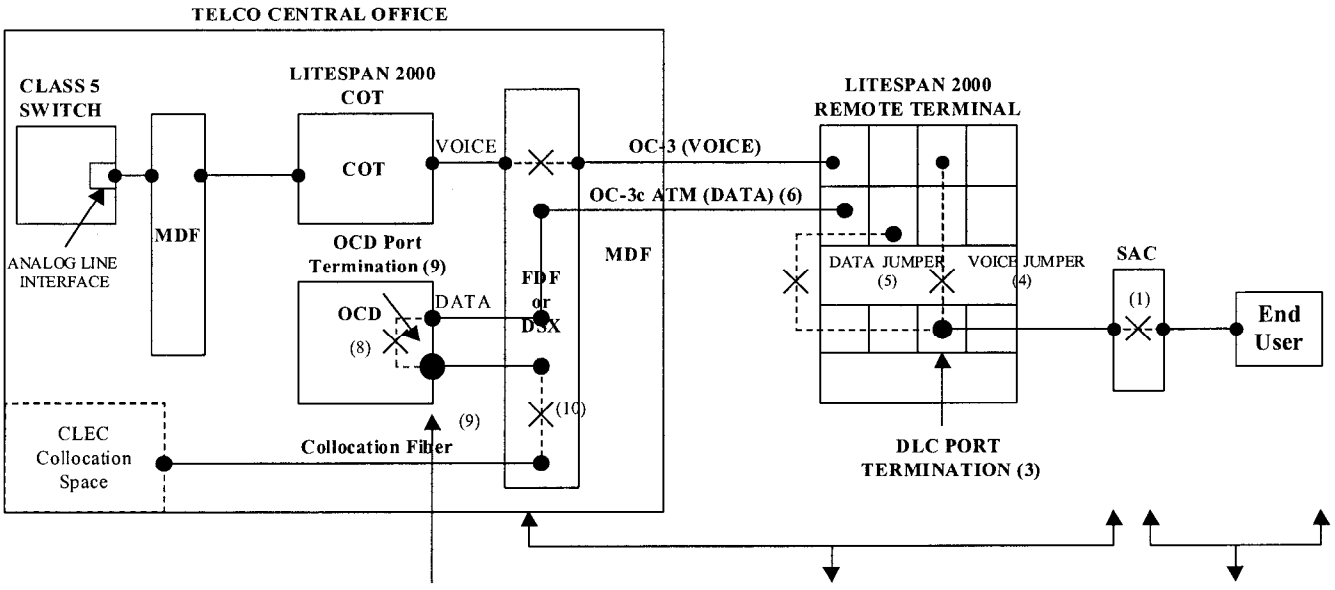
longer be line shared. In this instance, instead of purchasing the HFPSL, the CLEC will simply purchase the entire sub-loop from the SAI to the end user. Therefore an additional network service arrangement - dedicated sub-loop - will be made available to CLECs:

1. DLE-DSL Sub-Loop (DEDICATED DATA ONLY)

DIAGRAM 1: SBC WHOLESALE DATA SERVICES – LINE SHARED AND DATA ONLY

The following diagram illustrates the voice and data offerings addressed above. The incoming voice and data (or simply data in the case of a dedicated facility) is transmitted over the copper facility, through the NGDLC RT, to the port on the ADLU card. The ADLU card splits the voice and data signals – creating distinct paths for both voice and data. The line illustrated in blue represents the data portion of service from the ADLU card/port. The data is transmitted from the RT over the OC-3c dedicated fiber strand to the OCD in the serving wire center. From the OCD, incoming traffic from the multiple RTs associated with that OCD is routed to an outbound CLEC leased port delivered to CLEC collocation.



(1) DLE ADSL SAC Cross Connect
(2) **DLE-ADSL HFPSL**
(3) DLC Port Termination
(4) DLC Virtual Circuit - Voice
(5) DLC Virtual Circuit - Data
(6) OC-3c Dedicated for Data
(7) **DLE-ADSL Feeder**
(8) OCD Virtual Cross Connect
(9) **OCD Port Termination (OC-3 or DS3)**
(10) OCD Cross-Connect to Collocation (or UDT)

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INTEGRATED VOICE AND DATA

The third configuration that will be offered will be an integrated voice and data offering. This configuration will offer CLECs the capability to provide both the data and voice portions of the loop over the new broadband infrastructure. This will be provided by offering CLECs the underlying voice loop served over NGDLC delivered directly to the SBC Main Distribution Frame ("MDF") at the DS0 speed. CLECs will therefore have the ability to pick up the voice portion of the loop at the MDF as they would with any other voice loop. The data portion of the loop would continue to be provisioned in a like manner to the line shared network service arrangements as addressed above. In this instance, the CLEC would be required to purchase the following network service arrangements:

1. NGDLC xDSL Loop (For Voice Only) (UNDER DEVELOPMENT – SUBJECT TO CHANGE)
2. DLE-DSL Feeder
3. OCD Port Termination (OC-3 or DS3)

The NGDLC xDSL loop network service arrangement is still under development within SBC and is the network service arrangement that would deliver the voice network service arrangement back to the CLECs. This network service arrangement will serve as a 2-wire voice loop delivered back to the MDF. The data portion of this loop must be added as high spectrum data. This is added by ordering the DLE-DSL feeder and OCD Port Termination network service arrangements.

DIAGRAM 2: INTEGRATED VOICE AND DATA

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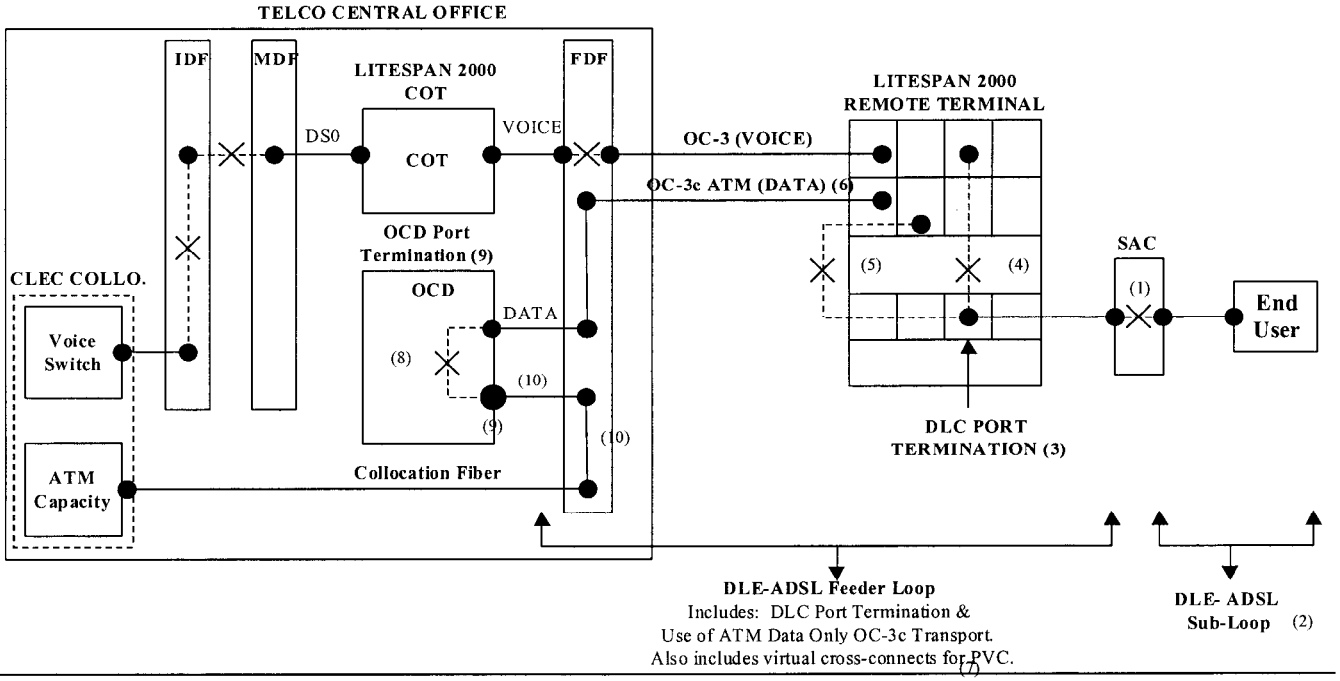
Diagram 2 illustrates SBC's integrated voice and data offering. In this scenario, SBC will provide CLECs an underlying voice loop terminating to the MDF and delivered to CLEC collocation in a manner similar to existing UNE 2-wire loops. Because the CLEC will have provisioned the underlying loop, in this scenario CLECs will not be required to purchase the HFPSL or sub-loop network service arrangements addressed above. SBC will provide CLECs the underlying loop and then subsequently add the data portion of the loop to provide the xDSL service. This will be accomplished by adding the DLE-ADSL Feeder network service arrangement to the OCD Port Termination to the underlying loop. The data side will continue to be delivered to the OCD in a like manner to that described above. The voice side will have a separate handoff



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(7) **DLE-ADSL Feeder**
(8) OCD Virtual Cross Connect
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(10) OCD Cross-Connect to Collocation (or UDT)

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LOOP QUALIFICATION

Loop qualification in this environment will still be recommended for CLECs. The existing loop qualification for current DSL services will be used. The loop information provided back to CLECs is expected to indicate to the CLEC if the loop is served out of an NGDLC RT, a non-DSL-capable DLC RT, or an all-copper loop out of a central office. This information will be necessary for the ordering of the network service arrangements from the central office to the end user. The CLEC is expected to perform loop qualification on an end user address that will return the indication that such TN or address is served out of NGDLC and at such time place an order for the associated NGDLC network service arrangements.

DSL TECHNOLOGIES SUPPORTED

At this time SBC is limited to offering only an ADSL form of service because the vendor of a majority of its NGDLC deployment has only developed an ADSL line card at this time. SBC has a strong incentive to consider the deployment of other versions or vintages of xDSL should a vendor develop additional line cards upon a CLEC request.

In relation to the ADSL service offered, the SOLID interface (see below) will allow CLECs the flexibility to build a large number of differentiated ADSL services at varying speeds within parameters established by SBC and the vendor. Using the SOLID system, CLECs will be able to place a new FID on the LSR submitted per end user xDSL order specifying a specific code set (a numerical value). Prior to placing that code set on an LSR, the CLEC must build profiles to associate with each value. When the LSR flows through TELCO systems, the SOLID system automatically provision the service corresponding to the code set illustrated on the order. CLECs will be capable of setting the following values (at a minimum) under this method:

DMT Upstream Minimum Rate	32 Kbps to 640 Kbps (increments of 32)
DMT Downstream Minimum Rate	640 Kbps to 8192 Kbps (increments of 32)
DMT Upstream Maximum Rate	32 Kbps to 640 Kbps (increments of 32)
DMT Downstream Maximum Rate	640 Kbps to 8192 Kbps (increments of 32)
DMT Upstream Minimum Noise	Integer Value: 0 to 31
DMT Upstream Target Noise	Integer Value: 0 to 31
DMT Upstream Max. Additional Noise	Integer Value: 0 to 31
DMT Upstream Max. Aggregate Power.	Integer Value: 0 to 20
DMT Upstream Max. Interleaved Channel Delay	Integer Value: 0 to 255
DMT Downstream Min. Noise	Integer Value: 0 to 31
DMT Downstream Target Noise	Integer Value: 0 to 31
DMT Downstream Max. Additional Noise	Integer Value: 0 to 31

As illustrated in the table above only DMT type xDSL services will be provided in conjunction with this offering.

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DESCRIPTION OF NETWORK SERVICE ARRANGEMENTS:

The following section discusses in more detail the network service arrangements that will be offered in conjunction with the various configurations provided for under this offering. The network service arrangements can be sub-divided into two distinct categories. The first being those network service arrangements necessary for the CLEC to establish infrastructure to support DSL services in the NGDLC environment; and the second being the network service arrangements necessary to establish an end user DSL service in the NGDLC environment.

INFRASTRUCTURE NETWORK SERVICE ARRANGEMENT

The infrastructure necessary for the CLEC to provision DSL service must be in place prior to placing orders for end user service. The infrastructure network service arrangement below will be the required in either a line shared or data only configuration. The following are the infrastructure network service arrangement that must be established:

OCD Port Termination: (NEW)

As discussed, incoming packets of data belonging to a particular CLEC's end users will be aggregated and routed to the CLEC's port on the OCD. The CLEC will be required to purchase a port termination on the OCD device in the central office. The OCD port termination will be made available at two speeds, OC-3c and DS3 speeds and will have an appearance on the FDF or DSX frame. From the FDF, the port will be extended to the CLEC's collocation site (via the OCD Cross Connect to Collocation).

END USER SPECIFIC NETWORK SERVICE ARRANGEMENTS

There are three end user specific network service arrangements necessary to provision a DSL service over the DLC infrastructure with a line shared or data only configuration. Those network service arrangements consist of either the DLE specific high frequency portion of the sub-loop (HFPSL); a DLE specific dedicated sub-loop; and the DLE feeder. These network service arrangements are described in detail in the following:

DLE-DSL HFPSL: (NEW)

The high frequency portion of the sub-loop from the SAI to the end user will be made available to CLECs. The HFPSL product will consist of the actual distribution copper sub-loops from the SAI to the NID at the end user's premises. In addition to this network service arrangement a cross-connect referred to as the DLE SAI Cross Connect will be necessary in the SAI box to cross connect the copper feeder loop from the RT site to the distribution copper sub-loop to the end user.

The new DLE-DSL HFPSL is defined as "the high frequency transmission path beginning at the SAI and extending to the standard Network Interface Device (NID) or demarcation point at the end user premises." The CLEC is responsible for providing the end user splitter at the customer premise. In all cases of line shared loops, the TELCO will be the voice provider. The CLEC will use the high frequency portion of the sub-loop (HFPSL) to provide DSL data services over the shared copper facility.

The infrastructure network service arrangement described above must also be in place for a period of 5 days prior to the provisioning of the HFPSL product. This particular version of line sharing will not be made available as part of any UNE Platform or UNE-P offering. The CLEC will issue an order by

telephone number (TN) for the HFPSL product. This order will be reflected upon the initial service order issued by CLEC.

A CLEC may order this HFPSL using the standard ordering mechanisms in place, either via EDI or an LSR. A single order will be used for both of the end user specific products offered: the HFPSL and the DLE feeder network service arrangement. Standard provisioning intervals for an Unbundled 2-wire DSL loops will apply. These intervals will vary by region.

DLE-DSL Sub-Loop (DATA ONLY)

The entire sub-loop from the SAI to the end user will be made available to CLECs for application in the data only environment. The DLE-DSL SUB-LOOP product will consist of the same makeup as the HFPSL network service arrangement described above, however, this network service arrangement will consist of the entire copper sub-loop network service arrangement from the SAI to the end user demarcation point.

DLE-ADSL Feeder: (NEW)

The copper HFPSL or data only sub-loop will be cross-connected to the DLE-ADSL Feeder at the SAI in the field. An integrated 25-pair copper feeder cable connects the SAI to the NGDLC RT equipment. In the NGDLC equipment, the ADLU card and NGDLC RT equipment will split the voice from the data and transmit the data to the central office over a dedicated OC-3c facility. The OC-3c from the RT terminates physically on the FDF and is then delivered to the OCD. A common network service arrangement referred to as the DLE-ADSL feeder will be offered to accommodate the use of the actual port on the ADLU card in the NGDLC equipment; the use of the dedicated fiber from the NGDLC RT to the central office; and for the use of the integrated cross-connect to the OCD. Pricing for this network service arrangement will be per Permanent Virtual Circuit (PVC). One PVC will be allocated per DLE-ADSL Feeder.

The data signals leaving the various ADLU cards placed in the Litespan equipment in the RT site will be transported to the central office over a common OC-3c dedicated facility for data. This facility transports data packets, once the data is split from the voice in the ADLU card, to the OCD. The OC-3c facility will be designed to take multiple packetized and multiplexed data signals outgoing from the NGDLC channel banks in an RT site, and then transport the signal to the OCD. The OC-3c transport will be designated for data traffic only. As described above, the OCD will provide a routing and aggregation functionality between the incoming OC-3cs to the central office and a dedicated CLEC port on the OCD extended to CLEC collocation.

A permanent virtual circuit (PVC) will be necessary from the Litespan equipment in the RT site through the OCD device (CBX-500) in the central office to the CLEC packet switch. A PVC is a locked up path from the Litespan to the OCD and ultimately to the CLEC ATM network. The PVC will consist of a virtual cross-connect placed in the Litespan; and an additional virtual cross-connect placed in the OCD. In addition to the virtual cross connects, the PVC will also consist of use of the OC-3c facility and fiber cross-connect between the Litespan equipment in the RT site and the OCD in the central office. The application of these virtual cross connects will be provided for in conjunction with this network service arrangement.

NGDLC xDSL 2-wire Loop (UNDER DEVELOPMENT – SUBJECT TO CHANGE)

This network service arrangement will equate to an underlying voice loop that will be provisioned over NGDLC. This loop will be delivered over NGDLC to the MDF in a similar manner to an existing unbundled loop. Once this network service arrangement is established, SBC will provide for CLECs to provision the DLE-ADSL feeder network service arrangement over this loop to terminate on a CLEC OCD

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port in the serving wire center. At that time, the CLEC will be delivered the data portion of the loop from the OCD to their point of collocation, and the CLEC will be delivered the voice portion of the loop to their point of collocation extended from the MDF (in the same manner as existing loops today). This will serve to provide the capability for an integrated voice and data provider to offer both the voice and data portions of a loop to an end user served over the NGDLC infrastructure. This network service arrangement is under development at this time and will be made available at a later date to be determined. Product specifications for this network service arrangement are subject to change.

HIGH LEVEL SERVICE ORDER FLOWS:

The following is an outline of the ordering and provisioning process within SBC for the establishment of the various applications discussed within this document. Ordering and provisioning of these network service arrangements will include Loop Qualification, an Infrastructure Service Order, and an End User Specific Service Order. At this time ordering specifications for the NGDLC xDSL loop network service arrangement have not been developed and as such are not addressed within this document.

1.) LOOP QUALIFICATION

The loop qualification process will be used to identify loops served out of the PRONTO infrastructure. A CLEC will perform a loop qualification using the customer address as they would for any DSL loop. If the loop qualification is returned with an indicator representing greater than 17.5Kft in loop length, and if a PRONTO remote terminal is available to move the customer to in order to provide DSL services, that remote terminal site CLLI will appear at the bottom of the loop qualification response.

2.) INFRASTRUCTURE SERVICE ORDERS

OCD Port Termination

Service Order: ASR. An ASR will be used for this order to reflect infrastructure. This order MUST be placed prior to or in conjunction with the first order placed for a sub-loop, HFPSL or DLE-DSL Feeder related to the wire center where the OCD is located.

Network Service Arrangements to Be Included on Service Order: NC/NCI Code, USOC, Class Service, and CLEC Point of Collocation (Bay/Panel/Jack Information).

CLIF Form: CLEC will be required to submit a CLIF form for each OCD port it wishes to establish at the same time as the ASR is submitted. The CLIF form will have to be submitted once per ASR. The CIF form will contain the information necessary to establish the coordinates in the OCD to route traffic to the CLEC ATM network.

INFRASTRUCTURE SERVICE ORDER FLOW:

Network Service Arrangements: OCD Port Termination **and** OCD Cross-Connect to Collocation

Service Order: ASR.

Interval: Same as existing intervals for OC-3c and/or DS3 unbundled transport. These intervals are defined by region. Order must be completed five (5) Business Days prior to first order for end user network service arrangements outlined below.

Sample Order Flow: (See Diagram Below)

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1. CLEC Issues ASR For OCD Port Termination and Cross-Connect.
2. A Location on ASR is CLEC Collocation Cage in the Serving Wire Center, Z Location is the OCD (CLEC will be able to obtain CLLI for the OCD from network disclosures related to PRONTO).
3. LSC Processes ASR. FOC back to CLEC is the Port Assignment on the OCD. ASR Flows Downstream to Network Organizations....
4. CLEC Submits CIF for the Port Assignment FOC'd to CLEC on ASR.
5. LSC Reviews CIF to Ensure All Fields Updated and Forwards CIF to NOC
6. NOC Establishes Logical Parameters in SOLID From CIF.

3.) END USER SPECIFIC ORDERS

DLE-DSL HFPSL & DLE-DSL FEEDER (LINE SHARED) OR DSL SUB-LOOP & DLE-DSL FEEDER (DATA ONLY)

Service Order: LSR. One LSR will be used for both of these items. A CRIS (non-design) order flow will be used for these network service arrangements. Logical parameters necessary for SOLID provisioning will be included on the LSR. A CLIF form will not be necessary for each end user order.

Network Service Arrangements to Be Included on Service Order: TN, End User Address, NC/NCI Code, USOC, Class Service, SOLID FID, and CFA (in both the Litespan and in the OCD).

A/Z LOC: The A Location will be the CLEC OCD Port termination in the Serving Wire Center. The Z Location will be the end user address.

END USER SERVICE ORDER FLOW:

Network Service Arrangements: DLE DSL-HFPSL **or** DLE-DSL Sub-Loop **and** DLE-DSL Feeder

Service Order: LSR.

Intervals: Intervals for this offering will be identical to existing intervals for existing DSL capable loops.

Network service arrangements to Be Included On Service Order: NC/NCI Code, USOC, Class of Service, FID 1 : CFA (OCD Port From Above ASR Order), FID 2 : VPI/VCI For OCD Port (From Above Order), FID 3 : VPI/VCI For Litespan (CLEC Parameters for their ATM Network), FID 4 : Code Set for CLEC Profile in SOLID.

Sample Order Flow: (See Diagram Below)

1. CLEC Establishes Infrastructure Network service arrangements as Outlined Above.
2. CLEC Builds Profile in SOLID
3. CLEC Issues LSR for End User Network service arrangements Outlined in this Section.
4. LSR is Processed by LSC
5. LSR Flows Through to SORD – SOAC - Network - SOLID
6. Network Configures Physical Network Service Arrangements for Service.
7. SOLID Configures Logical Network Service Arrangements for Service.

4.) SOLID

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A new interface referred to as SOLID is being developed that will manage both Litespan and OCD provisioning. The logical parameters necessary for Litespan and the OCD will be established in SOLID. As mentioned above, in conjunction with each OCD port the CLEC will submit a CIF form for information to flow from the CLEC; through the LSC; and to the NOC for establishment of there logical parameters in the OCD. A CLIF will not be necessary on end user orders. In that instance, the logical information will be contained on the LSR and will interface with the SOLID system.

SOLID PROFILES

CLECs will be allowed to build into SOLID a profile of service offerings that consist of combinations of various factors. Those factors are listed on the following flow chart. CLECs will be provided a set of values they can input for each factor and can establish any number of combinations of these network service arrangements that they wish. It is in this manner that CLECs will be able to offer different speeds and types of DSL service. CLECs will build these profiles via a web interface to SOLID and will be allowed to build an indefinite number of combinations.

5.) MECHANIZATION OF SERVICE ORDER FLOW

ASR: The ASR will be submitted by CLECs mechanized through the EXACT and CESAR systems. This is available today, but is dependent upon a CLEC having established OSS connectivity to the EXACT and CESAR applications.

LSR: The LSR will be submitted mechanized in a similar manner to all other LSRs submitted today. Mechanization will be available by 5/29/00 via EDI.

CLIF: Telco service order and downstream systems are not capable of managing logical layer assignments. In SBC, similar customer information forms are used for advanced services, i.e., Frame Relay (FRIF), Cell Relay (CRIF), VPOP-DAS (DIF), etc. SBC is developing a method for CLECs to submit the CLIF form via the Extranet.

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CLECs will be allowed to build into SOLID a profile of service offerings that consist of combinations of various factors. Those factors are listed on the following flow chart. CLECs will be provided a set of values they can input for each factor and can establish any number of combinations of these network service arrangements that they wish. It is in this manner that CLECs will be able to offer different speeds and types of DSL service. CLECs will build these profiles via a web interface to SOLID and will be allowed to build an indefinite number of combinations.

5.) MECHANIZATION OF SERVICE ORDER FLOW

ASR: The ASR will be submitted by CLECs mechanized through the EXACT and CESAR systems. This is available today, but is dependent upon a CLEC having established OSS connectivity to the EXACT and CESAR applications.

LSR: The LSR will be submitted mechanized in a similar manner to all other LSRs submitted today. Mechanization will be available by 5/29/00 via EDI.

CLIF: Telco service order and downstream systems are not capable of managing logical layer assignments. In SBC, similar customer information forms are used for advanced services, i.e., Frame Relay (FRIF), Cell Relay (CRIF), VPOP-DAS (DIF), etc. SBC is developing a method for CLECs to submit the CLIF form via the Extranet.

INTRODUCTION

The following document outlines the service order flow for the infrastructure network service arrangements associated with the Broadband Service. Those network service arrangements include the OCD Port Termination and associated cross-connect to CLEC collocation. The following ASR examples are valid for the Southwestern Bell and Pacific Bell regions at this time. SBC is validating these examples to determine if they can encompass the Ameritech and SNET regions. Further updates to this material will be provided via the CLEC handbook and/or future Accessible letters.

HIGH LEVEL ORDERING PROCESS FOR INFRASTRUCTURE NETWORK SERVICE ARRANGEMENTS

1. CLEC requests OCD Port Termination and associated cross-connect to SBC Local Service Center (LSC) using Access Service Request (ASR).

2. CLEC prepares CLIF Form in SOLID System - Form is stored in the system via Save.

3. SBC LSC performs Facility Check Inquiry

4. Upon Verification of Facilities, LSC FOCs Back to CLEC OCD Port Circuit ID and Order Number. Due Date intervals after the verification of facilities will vary by region but will equate to the same intervals for OC-3 or DS3 dedicated transport.

5. SBC LSC Representative Accesses SOLID system and Populates Form with OCD Port Circuit ID, PON Number and Order Number.

6. Order is Distributed By SBC LSC To Various Network Organizations for provisioning. SBC network organizations access SOLID system to retrieve the saved form and provision according to the material submitted by CLEC.

SERVICE REQUEST

The following ASR screens are used:

1. ASR Administrative Data - 1
2. Administrative Data - 2
3. Special Access

ASR ADMINISTRATIVE SCREEN

The following information on ASR Administrative Data - 1 screen indicates Broadband Service OCD requests:

1. Four-numeric CLEC Code on CC Field
2. A "Y" in the UNE field
3. "S" Requisition Type & Status in REQTYP Field

No verbal requests will be accepted. Refer to ASR Preparation Guide for more information and complete description of all fields.

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ENTRIES IDENTIFYING DS3 AND OC3C OCD

1. DS3 SERVICE REQUEST

NC Code = HF-6
NCI Code =04QB6.33
Example: ASR for DS3 service request

```
+-------------------------------------+
|                SPECIAL ACCESS       |
|CIRCUIT DETAIL                       |
|NC HF-6 NCI 04QB6.33        TLV      |
|SECNCI                   SECTLV _____|
|HVP __  NSIM __  RSP __              |
|CFA                                  |
|SCFA _____________________           |
+-------------------------------------+
```

2. OC3C SERVICE REQUEST

NC Code = OB-P
NCI Code =02QBF.LL

Example: ASR for OC3c service request

```
+-------------------------------------+
|                SPECIAL ACCESS       |
|CIRCUIT DETAIL                       |
|NC OB-P NCI 02QBF.LL        TLV      |
|SECNCI                   SECTLV _____|
|HVP __  NSIM __  RSP __              |
|CFA                                  |
|SCFA _____________________           |
+-------------------------------------+
```

Note: NC and NCI same at both location (SECLOC)

ACCESS SERVICE REQUEST - DIAGRAMS

DS3 (COLLOCATION CAGE)-TO-OCD PORT

The following is a completed ASR sample for a DS3 Collocation Cage-to-OCD Port:

1. PIU Always use 0 for assembly of network elements service requests.
2. Spec codes are required by the CLEC for SWBT
3. This service configuration requires the following ASR screens:
   - ASR Admin Data – 1, Admin Data – 2, Special Access
4. CLEC must provide the following unique order information:
   - ACTL, Tie Down Information in APOT of ASR, Valid NC and NCI Code Combinations and CLLI Code of the OCD switch location in the SECLOC field.

ASR ADMINISTRATIVE DATA - 1

AMINISTRATIVE SECTION ORD NO _____ MORE _
ICSC **PT04** PON **UNIQUE2CLC** VER __ NOR __ OF __ ASR NO _____
ASC-EC ____ OEC 1 ____ OEC 2 ____ OEC 3 ____ OEC 4 ____ OEC 5 ____ OEC 6 ____
D/T SENT **04 - 21 -00 - 0100PM** DDD **05 - 01 –00** PROJECT _____ RTR **S** CNO __

REQTYP **SD** ACT **N** FDT _____ SUP _ AFO ____ TQ __ EXP _ AENG _ ALBR _ QA _
CCNA **ABC** CUST **ABC TELCOM** CC **0001** AGAUTH _ DATED __ - __ - __
CKR **XXXXX** PLU __ PIU **0**
ECCKT _____ UNIT ___ QTY **1**
FNI _____ CFNI _____ SPEC _____ QTY _____
PPTD __ - __ - __ PFPTD __ - __ - __ FBA _
BAN **222 - 222 - 2222** ACTL **SNJSCA11XXX** APOT **(1)** _____ AI _ TSP _____ - __
BIC _ BIC TEL ___ - ___ - ____ BIC ID _____ RORD _____
RPON _____ CCVN _____ AFG _ SPA _ BSA _ LTP ____
REMARKS
_____
_____

SCREEN OPTION __ PAGE __
A A2 S QC MP G

ADMINISTRATIVE DATA - 2

BILLING SECTION
ACNA **ABC** TE _ SCL _ SAN _____
BILLNM SBILLNM _____
STREET FLOOR _____ ROOM _____
CITY STATE __ ZIP CODE __ - ____
BILLCON TEL NO __ - __ - __ - ____
VTA _____ EBP _____ ABC A _ C _ D _ F _ I _ L _ M _ O _ U _

CONTACT SECTION
INIT **JOIHN DOE** TEL NO **415 –111-1111**- ____
STREET **525 MARKET ST** FLOOR ___ ROOM
CITY **SAN FRANCSICO** STATE **CA** ZIP CODE **94107** - ____
DSG CON **SUSAN SEVANS** DRC ___ FDRC ___ TEL NO **415 – 111-2222** - ____
STREET **525 MARKET ST** FLOOR ___ ROOM **123**
CITY **SAN FRANCISCO** STATE **CA** ZIP CODE **94107** - ____
IMP CON **BETTY BROWN** TEL NO **415 – 111 - 1234** - ____
D/TREC **04-21-00 14:56**

SCREEN OPTION __ PAGE __
A A2 S QC MP G
V=001

NC and NCI codes indicate service request is DS3 or OC3

Example:

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-NC
HF-6 = DS3
OB-R = OC3c

-NCI
04QB6.33 = DS3
02QBF.LL =OC3c

SECLOC - Secondary Location Identifies terminating end of circuit-OCD Port followed by CLLI Code preceded by "C" on SECLOC field of Special Access screen

SPECIAL ACCESS
CIRCUIT DETAIL

NC **(1)** NCI **(2)** TLV _____ T _____ R S25 **A** GBTN _____
SECNCI SECTLV _____ T _____ R NSB _ CKLT _____ NSL __
HVP _ NSIM _ SR ___ TRF _ MST _ ATN _____ SSS _ GETO _ GBTN _____ NVC __
CFA _____ CFAU _ MUXLOC _____
SCFA _____ HBAN ___ - ___ - ____ N/U _
PRI ADM _____ SEC ADM _____ CLK _ LMP _ PSPEED _____ ZLG _
LOCATION SECTION
SECLOC **CSNFCXXXX** OTC ____ SI _ SPOT _____
STREET BLDG _____ FLOOR _____ ROOM _____
CITY STATE ACTEL - ____
EUCON _____ EUTEL ___ - ___ - ____ - ____
ALOC _____
_____
LCON ACC _____
JS _ JKCODE _____ JKNUM __ JKPOS __ PCA _____ REN ____
CTX TEL ___ - ___ - ____ CTX LSTD NM _____

REMARKS

SCREEN OPTION __ PAGE __
A A2 S QC MP G
V=001

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CLIF FORM EXHIBIT

CLEC INFORMATION FORM
OCD Connection

SBC Service Order No. _____
SBC Circuit ID _____
(To be completed by LSC personnel)

Customer Information

(To be completed by CLEC)

CLEC Name: _____
CLEC Technical Contact Name: _____ **Email:** _____
CLEC Technical Contact Telephone Number: _____
CLEC Contact Address: _____
PON (Purchase Order Number): _____

SBC Account Manager
(To be completed by CLEC)

Account Manager Name: _____**Tel. No.** _____

Logical Parameters
(To be completed by CLEC)

OCD Wire Center CLLI:

Connection Speed:	___**OC-3**	___**DS3**	
Connection Type:	___**UNI DCE**	___**UNI DTE**	___**NNI**
VPI Range:	**1-255**	**VCI Range:**	**1-63 Less 3,4,5, and 16.**
Clock Source:	___**External**	___**Internal**	

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